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## **Telecommunication Economics. Selected results of the COST Action ISO605 Econ@Tel**

Edited by: Hadjiantonis, Antonis M ; Stiller, Burkhard

**Abstract:** This book constitutes a collaborative and selected documentation of the scientific outcome of the European COST Action ISO605 Econ@Tel "A Telecommunications Economics COST Network" which run from October 2007 to October 2011. Involving experts from around 20 European countries, the goal of Econ@Tel was to develop a strategic research and training network among key people and organizations in order to enhance Europe's competence in the field of telecommunications economics. Reflecting the organization of the COST Action ISO605 Econ@Tel in working groups the following four major research areas are addressed: - evolution and regulation of communication ecosystems; - social and policy implications of communication technologies; - economics and governance of future networks; - future networks management architectures and mechanisms.

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# Telecommunication Economics

Selected Results of the  
COST Action IS0605 Econ@Tel

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# Preface

The COST Action IS0605 Econ@Tel “A Telecommunications Economics COST Network” was managed within the “Individuals, Societies, Cultures and Health” (ISCH) domain and had a four-year duration between October 2007 and October 2011. COST defines an intergovernmental framework for European Cooperation in Science and Technology, allowing the coordination of nationally funded research on a European level. COST approves specific Actions, which establish networks of such nationally funded research projects, thereby contributing to the reduction of fragmentation in European research investments and opening the European research area to cooperation worldwide.

The goal of Econ@Tel was to develop a strategic research and training network among key people and organizations in order to enhance Europe’s competence in the field of telecommunications economics. In that sense, Econ@Tel planned to support related research and development initiatives, and planned to provide guidelines as well as recommendations to European stakeholders for the provision of new converged broadband, wireless, content delivery networks to citizens and enterprises, addressing technology, economics, policies, and regulation.

Therefore, Econ@Tel started a cross-disciplinary work and coordinated in selected fields the development of research methodologies and tools from engineering, media, and business research. By mobilizing a “critical mass” and diversity of European economists, business research experts, engineers, and scientists working in communications, content economics, policy, and regulations it was the first cross-disciplinary COST Action tackling jointly these issues in particular. Thus, Econ@Tel brought together experts from several European member states and associated countries, including Austria, Belgium, Cyprus, Denmark, Finland, France, Georgia, Germany, Greece, Hungary, Israel, Italy, The Netherlands, Poland, Portugal, Romania, Slovenia, Spain, Sweden, Switzerland, and the UK.

The team of Econ@Tel researchers met in the course of the Action in eight Management Committee Meetings (MCM), which covered between one- or two-and-a-half-day technical presentations for all Action members and the public. Additionally, many Working Group (WG) meetings were either collocated with these MCMs or organized at separate times and locations. These WG meetings typically focused on a dedicated topic and covered intense discussions based on presentations given and ideas exchanged. Besides those events, Econ@Tel organized two public workshops in Stockholm and Budapest offering to the wider research public insights into the work performed in the context of Econ@Tel and outcomes achieved. Furthermore, the Action organized two training schools

mainly for junior researchers, one in Copenhagen on “Techno-economics of Mobile Networks and the Internet” and the second one in Budapest on “Wireless LTE (Long Term Evolution) Business Models,” which distributed Econ@Tel expertise. Finally, 16 Short Term Scientific Missions (STSM) were organized to host an expert, a senior or junior researchers from one institution, at another institution for about one week and to foster the detailed interchange and joint work on common interests. All of those publicly available abstracts, reports, and presentations can be downloaded from Econ@Tel’s website at <http://www.cost605.org>.

Therefore, this volume of the *Lecture Notes in Computer Science* series on “Telecommunications Economics” contains a collaborative and selected outcome of Econ@Tel members’ work, who have participated in the COST Action IS0605 “A Telecommunications Economics COST Network.” The Action’s four WGs are reflected in four major research areas — each of them represented in a main chapter of this book, covering selected results — and especially addressing (a) Evolution and Regulation of Communication Ecosystems, (b) Social and Policy Implications of Communication Technologies, (c) Economics and Governance of Future Networks, and (d) Future Networks Management Architectures and Mechanisms.

Since COST Actions like Econ@Tel are precursors of advanced multidisciplinary research, they anticipate and complement many activities of the EU Framework Programs, and constitute a bridge toward scientific communities of emerging technical, economic, policy-related, regulatory, and organizational stakeholder of COST countries. As such and as mentioned above, these Actions and in particular Econ@Tel also increased the mobility of researchers across Europe and fostered the establishment of scientific excellence in these different key domains among junior and senior researchers.

Furthermore, the editors of this volume would like to extend their thanks to the Springer team for the smooth cooperation in finalizing this scientific report. Finally, special gratitude goes to COST, ISCH domain, and those many COST Action IS0605 Management Committee Members who contributed actively in the course of the Action itself and especially to this book.

February 2012

Antonis M. Hadjiantonis  
Burkhard Stiller



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in Science and Technology



Individuals, Societies,  
Cultures and Health (ISCH)

# Table of Contents

## Telecommunication Economics

Introduction.....	1
<i>Antonis M. Hadjiantonis</i>	

## Evolution and Regulation of Communication Ecosystems

Introduction.....	3
<i>Sandro Mendonça</i>	
Evolution and Regulation of Mobile Ecosystems: European Information Society Policies for the Mobile Search Domain .....	5
<i>Sergio Ramos, José Luis Gómez-Barroso, and Claudio Feijóo</i>	
International Roaming of Mobile Services: The Need for Regulation ....	14
<i>Morten Falch</i>	
Mobile Regulation for the Future .....	22
<i>Zsuzsanna Kósa</i>	
Trademarks as a Telecommunications Indicator for Industrial Analysis and Policy .....	33
<i>Sandro Mendonça</i>	

## Social and Policy Implications of Communication Technologies

Introduction.....	42
<i>Antonis M. Hadjiantonis</i>	
Mobile Communications of the Needy and Poor: Affordability Indicators, European Data, Social Tariffs.....	44
<i>Louis-Francois Pau, Pedro Puga, Hong Chen, and Zviad Kirtava</i>	
Implications of mHealth Service Deployments: A Comparison between Dissimilar European Countries.....	56
<i>Frederic Vannieuwenborg, Zviad Kirtava, Lambros Lambrinos, Jan Van Ooteghem, and Sofie Verbrugge</i>	
Social Communication Behaviors of Virtual Leaders .....	67
<i>Daphna Shwartz-Asher</i>	

Policy Implications of Digital Television .....	78
<i>Bartolomeo Sapio</i>	

## **Economics and Governance of Future Networks**

Introduction.....	89
<i>Bruno Tuffin</i>	
Public Intervention in the Deployment of NGNs .....	91
<i>José Luis Gómez-Barroso and Claudio Feijóo</i>	
Public Private Partnerships and Next Generation Networks .....	100
<i>Idongesit Williams and Morten Falch</i>	
Internet Governance and Economics of Network Neutrality .....	108
<i>Patrick Maillé, Peter Reichl, and Bruno Tuffin</i>	
Green Networks and Green Tariffs as Driven by User Service Demand .....	117
<i>Louis-Francois Pau</i>	
Environmental Impact of ICT on the Transport Sector.....	126
<i>Morten Falch</i>	
Cost-Efficient NGN Rollout .....	138
<i>Sofie Verbrugge, Jan Van Ooteghem, Koen Casier, Marlies Van der Wee, and Mathieu Tahon</i>	
Software Business in the Telecommunications Sector.....	148
<i>Lauri Frank, Eetu Luoma, Oleksiy Mazhelis, Mirja Pulkkinen, and Pasi Tyrväinen</i>	

## **Future Networks Management Architectures and Mechanisms**

Introduction.....	156
<i>Iztok Starc</i>	
Economics of Quality of Experience .....	158
<i>Peter Reichl, Bruno Tuffin, and Patrick Maillé</i>	
Decision Support in Contract Formation for Commercial Electronic Services with International Connection .....	167
<i>Martin Waldburger and Burkhard Stiller</i>	
Competition among Telecommunication Providers.....	179
<i>Patrick Maillé, Peter Reichl, and Bruno Tuffin</i>	



Economic Traffic Management: Mechanisms and Applications . . . . .	188
<i>Fabio Hecht and Burkhard Stiller</i>	
Autonomic Management of Mobile and Wireless Networks . . . . .	199
<i>Antonis M. Hadjiantonis</i>	
On the Provision of Advanced Telecommunication Services in Rural Areas . . . . .	209
<i>Lambros Lambrinos</i>	
Electrical Power Systems Protection and Interdependencies with ICT . . .	216
<i>George M. Milis, Elias Kyriakides, and Antonis M. Hadjiantonis</i>	
Towards Quantitative Risk Management for Next Generation Networks . . . . .	229
<i>Iztok Starc and Denis Trček</i>	
<b>Summary and Conclusions</b>	
Résumé . . . . .	240
<i>Burkhard Stiller</i>	
<b>Author Index</b> . . . . .	243